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**WE CLAIM**

1. Composition useful in suppressing proliferation of target cancer cells, produced by entrapping a sample of cancer cells in a biocompatible, proliferation-restrictive, selectively-permeable structure, culturing said structure in culture medium for a time sufficient to restrict the proliferation of said entrapped cancer cells, wherein said entrapped cancer cells produce cancer-cell proliferation suppressing material which suppresses proliferation of the target cancer cells and recovering the medium.

2. The composition of claim 1, wherein said filter separates material having a molecular weight of at least about 30 kd from material having a molecular weight less than about 30 kd, wherein said composition comprises material having a molecular weight of at least about 30 kd.

3. The composition of claim 1, wherein said entrapped cancer cells are of epithelial origin.

4. The composition of claim 1, wherein said entrapped cancer cells are breast cancer cells, renal cancer cells, prostate cancer cells or choriocarcinoma cells.

5. The composition of claim 1, wherein said entrapped cancer cells are human cancer cells.

6. The composition of claim 1, wherein said entrapped cancer cells are mouse cancer cells.

7. The composition of claim 1, wherein said structure contains from about 10,000 to about 500,000 cancer cells.

8. The composition of claim 1, wherein said structure contains from about 30,000 to about 250,000 cancer cells.

9. A process for making a composition which has a cancer cell proliferation-inhibiting effect, comprising culturing a biocompatible, proliferation-restrictive, selectively-permeable structure which has cancer cells entrapped therein in a medium for a time sufficient for said

cancer cells to produce cancer-cell proliferation-suppressing material, and recovering the medium.

10. The process of claim 9, comprising filtering said medium through a filter which retains material having a molecular weight of at least about 30 kd.

11. The process of claim 9, wherein said medium is serum free.

12. The process of claim 9, wherein said cancer cells are human cancer cells.

13. The process of claim 9, wherein said cancer cells are mouse cancer cells.

14. The process of claim 9, wherein said cancer cells are of epithelial origin.

15. The process of claim 14, wherein said cancer cells are selected from the group consisting of breast cancer cells, renal cancer cells, prostate cancer cells, and choriocarcinoma cells.

16. The process of claim 9, wherein said structure contains from about 10,000 to about 500,000 cells.

17. The process of claim 16, wherein said structure contains from about 30,000 to about 250,000 cells.

18. The process of claim 9, wherein said structure is a bead.

19. A method for suppressing the proliferation of cancer cells in a subject in need thereof, comprising administering to said subject a therapeutically effective amount of biocompatible, proliferation-restrictive, selectively-permeable structures which contain restricted cancer cells from a species other than said subject, wherein said restricted cancer cells produce a material which suppresses cancer cell proliferation, in an amount sufficient to suppress cancer cell proliferation in said subject.

20. The method of claim 19, wherein said restricted cancer cells are a type of cancer different from the type of cancer with which said subject is afflicted.

21. The method of claim 19, wherein said restricted cancer cells are the same type of cancer with which said subject is afflicted.

22. The method of claim 19, wherein said structure is a bead.

23. The method of claim 19, wherein said structure contains from about 10,000 to about 500,000 cells.

24. The method of claim 23, wherein said structure contains from about 30,000 to about 250,000 cells.

25. The method of claim 19, wherein said restricted cancer cells are of epithelial origin.

26. The method of claim 25, wherein said restricted cancer cells are selected from the group consisting of breast cancer cells, prostrate cancer cells, renal cancer cells, and chorio-carcinoma cancer cells.

27. The method of claim 19, wherein said subject is a human.

28. The method of claim 27, wherein said cancer cells are mouse cancer cells.

29. A method for suppressing proliferation of cancer cells in a subject in need thereof, comprising administering to said subject a therapeutically effective amount of biocompatible, proliferation-restrictive, selectively-permeable structures which contain restricted cancer cells from the same species as said subject, wherein said restricted cancer cells produce a material which suppresses cancer-cell proliferation, in an amount sufficient to suppress cancer-cell proliferation in said subject.

30. The method of claim 29, wherein said restricted cancer cells are from a different individual than said subject.

31. The method of claim 29, wherein said restricted cancer cells are taken from the subject to which said structures are administered.

32. The method of claim 29, wherein said subject is a human.

33. The method of claim 29, wherein said structure is a bead.

34. The method of claim 29, wherein said restricted cancer cells are of epithelial origin.

35. The method of claim 29, wherein said restricted cancer cells are of a type different from the cancer with which said subject is afflicted.

36. The method of claim 29, wherein said restricted cancer cells are of the same type as the cancer with which said subject is afflicted.

37. The method of claim 34, wherein said restricted cancer cells are breast cancer cells, renal cancer cells, or prostate cancer cells.

38. The method of claim 29, wherein said structure contains from about 10,000 to about 500,000 cells.

39. The method of claim 38, wherein said structure contains from about 30,000 to about 250,000 cells.

40. A method for suppressing proliferation of cancer cells in a subject in need thereof, comprising administering an amount of the composition of claim 1 to said subject in an amount sufficient to suppress proliferation of cancer cells in said subject.

41. The method of claim 40, wherein said subject is a human.

42. The method of claim 41, wherein said entrapped cancer cells are not human cells.

43. The method of claim 42, wherein said entrapped cancer cells are mouse cells.

44. The method of claim 41, wherein said entrapped cancer cells are human cells.

45. The method of claim 40, wherein said restricted cancer cells are of the same type as the cancer with which said subject is afflicted.

46. The method of claim 40, wherein said restricted cancer cells are cancer cells taken from the subject to which said structure is administered.

47. The method of claim 40, wherein said restricted cancer cells are of epithelial origin.

48. The method of claim 47, wherein said restricted cancer cells are selected from the group consisting of renal cancer, choriocarcinoma, breast cancer, and prostate cancer.

49. The method of claim 40, wherein said structure contains from about 10,000 to about 500,000 cells.

50. The method of claim 49, wherein said structure contains from about 30,000 to about 250,000 cells.

51. A composition of matter comprising a biocompatible, proliferation-restrictive, selectively-permeable structure, said structure restricting cancer cells which produce more of a material which suppresses cancer cell proliferation compared to an equal number of the same cancer cells when unrestricted.

52. A process for preparing a biocompatible, proliferation-restrictive, selectively-permeable structure, comprising the steps of forming a structure by contacting cancer cells with biocompatable, proliferation-restrictive matter to form the structure, and culturing the structures for a sufficient period of time to restrict said cancer cells such that they produce a material which

suppresses cancer cell proliferation compared to an equal number of unrestricted cancer cells of the same cancer type.

53. A method of increasing the production of material that suppresses cancer cell growth by a cancer cell, comprising restricting cancer cells with a structure-forming material to form a biocompatable, selectively-permeable, proliferation-restrictive structure and culturing the cancer cells until they are restricted.